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NATIONAL DEFENSE UNIVERSITY

NATIONAL WAR COLLEGE

**COURSE ESSAY for ADVANCED STUDIES 324:
NATIONAL STRATEGY AND MARITIME POWER**

TOWARDS A MARITIME STRATEGY FOR THE 21st CENTURY

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Report Documentation Page				Form Approved OMB No. 0704-0188	
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1. REPORT DATE 1996		2. REPORT TYPE		3. DATES COVERED 00-00-1996 to 00-00-1996	
4. TITLE AND SUBTITLE Towards a Maritime Strategy for the 21st Century				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National War College, 300 5th Avenue, Fort Lesley J. McNair, Washington, DC, 20319-6000				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT see report					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 20	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

INTRODUCTION

*“With the demise of the Soviet Union, the free nations of the world claim preeminent control of the seas and ensure freedom of commercial maritime passage. As a result, our national maritime policies can afford to deemphasize efforts in some naval warfare areas.”
... From The Sea, 1992¹*

Amid the celebrations following the end of the Cold War, many cautioned it was too soon for the United States to relax its guard, that the collapse of the Soviet Union was too good to be true. As time parted the veil of uncertainty, it became evident that the Cold War had yielded to a new paradigm oriented on regional threats and issues. The forces of the former Soviet Union were in disrepair, and the reemergence of a peer competitor capable of challenging U.S. security interests on a global scale was unlikely in the near-term. Less than ten years from the beginning of a new century, the Armed Forces of the United States faced the challenge of reshaping their strategic visions and force structures for a changing security environment.

This essay critically examines the Navy's response to the end of the Cold War and suggests that a maritime strategy focused on providing critical capabilities in the early stages of a major regional conflict may better facilitate future joint operations. It begins by briefly tracing the evolution of the Navy's strategic vision and the pervasive influence of the theories of Alfred Thayer Mahan. At the end of the 19th Century, the Navy deliberately moved from a force suited for coastal defense to one capable of destroying enemy fleets in offensive operations as advocated by Mahan.² His principles gave naval strategists a theoretical basis for building a Navy suited to the ambitions of a young nation seeking to expand its influence. The period between the world wars saw the development of carrier aviation and a doctrine for amphibious warfare. Despite these innovations,

¹ *From The Sea* (Washington, D C: Department of the Navy, 1992), 3

² Alfred Thayer Mahan, America's greatest naval theorist, believed a great nation needed a powerful navy centered on large capital ships. This fleet should be concentrated at all times so it could sail at the first sign of trouble to find the enemy's fleet, then engage and defeat it in a decisive, war-ending battle.

the Navy's focus remained on maintaining a battleship fleet capable of Mahanian warfare. The end of World War II provided another opportunity for change, but the emergence of a Soviet blue-water threat and continued adherence to Mahan's principles again precluded a significant change in the Navy's strategic vision. Following the demise of the Soviet empire, the Navy published *From The Sea and Forward*. *From The Sea*, a new strategic vision for the Navy and Marine Corps. As the men and women of the Navy work toward the goals expressed in these documents, they should not revert to a Mahanian mindset that insists the only way to end a crisis is by employing capital ships to win a decisive victory at sea. Nor should they seek to replicate capabilities better provided by other Services to conduct sustained combat operations on land. Instead, the Navy could best support the nation's regional security strategy by tailoring its maritime strategy and forces to wage limited warfare in the littorals and to provide key forces for joint operations in the first critical days of a major regional conflict.

U.S. MARITIME STRATEGY: A BRIEF HISTORY

From coastal defense to *guerre de main*

Prior to Mahan's emergence as a naval prophet, the United States Navy closely reflected the nation's isolationist bent. America saw itself as a continental, and not a maritime, power.³ In fact, shortly after the end of the Revolutionary War, America so embraced the continent as its source of power that it disbanded its embryonic Navy. Fortunately, the extremism of that position was soon seen as folly and the United States Navy was once again formed in 1798, never again to be disbanded.⁴ However, the military strategy of the nation and the Navy remained oriented to coastal defense, reflecting a belief in the superiority of the defense as well as America's reluctance to involve

³ Kenneth J. Hagan, *This People's Navy, The Making of American Sea Power* (New York: The Free Press, 1991), 228.

⁴ Compton's Interactive Encyclopedia, Compton's NewMedia, Inc., 1994.

itself in foreign affairs.⁵ Coastal defense determined the Navy's mission, operational strategy, and force structure.⁶ National defense was assured by the Army's coastal batteries and the Navy's small coastal monitors; there was little need for a Navy equipped with a large fleet of capital ships. A few small gunboats allowed the United States to influence foreign governments in a limited way via "gunboat diplomacy." If a more aggressive action was necessary, the nation could mount a *guerre de course* using privateers or a small fleet of capital ships operating independently. If the Navy lost its portion of a conflict, the nation could still count on the expanses of the Atlantic and Pacific and its Army to prevent a successful invasion.⁷

In 1890, Mahan published his classic treatise on sea power titled The Influence of Sea Power upon History, 1660-1783. The United States and its Navy quickly adopted his central thesis that the nation required a large fleet capable of offensive operations on the high seas.⁸ Although America remained isolationist, its expanding empire seemed to require a large Navy. Henceforth, the Navy would fight a *guerre de main* against the nation's enemies. Future naval battles could be fought at sea or along an enemy's shores instead of the coast of the North American Continent. While this could still be construed as a defensive strategy, the Navy accepted the notion that the best defense was to seek out and destroy the enemy's fleet in a decisive engagement using the battleship as the primary means of massing offensive power. Mahan's philosophy gained credence with the U.S. victory in the Spanish-American War, occasioned by Admiral Dewey's defeat of the Spanish Fleet in Manila in 1898. The Japanese victory over Russia in the 1905 Russo-Japanese War also seemed to confirm Mahan was right, since their victory was widely believed to be the result of the Imperial Japanese Navy's annihilation of the Russian fleet in the Tsushima Straits.

⁵ Hagan, 234

⁶ Hagan, 209

⁷ The nation also benefited from the continued maritime dominance of the British Navy.

⁸ Mahan may have precipitated this change or may simply have been the author who recorded an extant philosophy.

America continued to develop a Mahanian Navy oriented around the battleship through the start of World War I, with notable fits and starts in its ship-building program. However, wartime experiences quickly revealed serious flaws in a number of the Navy's pre-war assumptions. Unbalanced American and British battleship fleets designed to conduct a *guerre de main* could not counter the German *guerre de course* fought with the new Unterseeboots.⁹ Even when both of the Allied fleets were better equipped to handle the submarine threat, their focus on decisive battle and the offensive precluded defensive convoy operations until mounting losses of allied shipping forced a shift in strategy. Clearly, battleships were of limited value against commerce raiders, especially submarines. They were also of limited use if the enemy fleet was unwilling to engage in the decisive battle desired by Mahanian admirals. The one large fleet engagement of the war between the British and Germans at Jutland in 1916 was inconclusive and failed to bring an end to hostilities. Despite the evidence of World War I, Navy strategists' belief in the power of the battleship and the need for a decisive fleet engagement remained unshaken.

A world-class Mahanian power

Mahan's influence remained prevalent throughout the interwar years, although different administrations restricted the growth and modernization of what was now a world-class American Navy.¹⁰ While growth was restricted primarily by economic conditions, the nation again drifted into isolationism and a defensive security posture. However, a nation with expanding interests and responsibilities could not completely ignore potential threats from Europe or an increasingly aggressive Japan. To keep risks acceptable, the U.S. signed treaties that guaranteed the U.S. Navy and Great Britain's Royal Navy would remain equals in numbers of capital ships, while the Imperial

⁹ Baer, 59, 61

¹⁰ President Hoover, for example, was interested in a coastal defense. Hagan, 277

Japanese Navy would be limited to 40% fewer capital ships than either the U.S. or Britain. Unfortunately, isolationist administrations and the Great Depression prevented the U.S. from reaching its treaty limits, while the Japanese continued to build up to or even exceed its allowable limits.¹¹

War plans also continued to be influenced by Mahanian principles. This was most noticeable in the Pacific, where War Plan Orange called for winning a decisive naval battle with Japan in a clash of battleship-dominated fleets. During World War II, the campaign in the Central Pacific was fought by adherents to Mahan's theories, even though decisive fleet engagements again proved elusive. One significant change to Mahan's precepts came about as a result of the Japanese surprise attack on Pearl Harbor. Because the U.S. battleship fleet was so severely damaged, the aircraft carrier replaced the battleship as the Navy's capital ship. The Navy's reliance on a Mahanian doctrine of decisive fleet engagements remained intact; only the type of capital ship had changed. Mahan's lingering influence was also evident in the Atlantic, where the Allies, despite the lessons of World War I, again delayed initiating a defensive strategy of convoy operations.¹²

In search of a mission: The Cold War era

Victory in World War II and the lack of a significant blue-water threat immediately after the war provided the Navy another opportunity to reevaluate its Mahanian strategy. The emergence of the Soviet Union as a threat to our global interests led to a search for a means to deliver nuclear weapons from the sea, as well as a rationale to preserve a fleet oriented around carriers. Of course, a potential war with the Soviet Union was not the only threat that shaped naval forces in the post-war era. The Navy's strategy continued to evolve as the nation went from near-total reliance on nuclear

¹¹ Baer, 95

¹² Murray Williamson, "Naval Power in World War I," Seapower and Strategy, Gray, Colin and Barnett, Roger, eds (Annapolis: U.S. Naval Institute Press, 1989), 205

deterrence to a broader strategy of flexible response. The Korean and Vietnam conflicts showed the peripheral nature of naval engagements in limited conventional wars; they also reaffirmed the value of naval support for land operations. Despite these conventional conflicts, none of the Services lost sight of the fact that the Soviets posed the major threat to U.S. interests. For the U.S. Navy, that meant their primary focus should remain on how to defeat a Soviet fleet increasingly capable of blue-water operations, a typically Mahanian concept.

The *Maritime Strategy* of 1986 postulated that a fight with the Soviet Navy was an effective means of complementing a major conflict on the European continent. However, the *Maritime Strategy* adopted an inflexible view on how the Soviet Navy would fight, the strategy contained too many “ifs.” If the Soviet Navy accepted Mahan’s tenets, maybe it would seek a decision at sea. If the Soviet Navy set sail for a decisive engagement, maybe the U.S. Navy could find and defeat it in battle. If the U.S. Navy won a decisive battle, it might turn the tide in Europe. Unfortunately, the Soviet Union may have been more concerned about defending its shores and protecting its nuclear forces than it was in taking the fight to the enemy at sea.¹³ This would have kept the Soviet Navy close to home, allowing them to take advantage of their defensive strengths and operate under the umbrella of land-based air forces. In such a scenario, a concentrated U.S. fleet would be left seeking a decisive battle while relatively unprotected Allied convoys remained vulnerable to attack by Soviet submarines, imperiling the critical resupply of troops ashore. While many questioned the assumptions of the *Maritime Strategy*, it did provide a rationale for an aggressive shipbuilding program and preserving a large fleet centered on carrier battle groups. After forty years of the Cold War, the Navy had finally found a vision that fit its preferred strategy and met its institutional needs.

¹³ Baer 394-395

However, within a few short years, the Navy again faced the challenge of restructuring its strategy and force structure for a changing national security policy

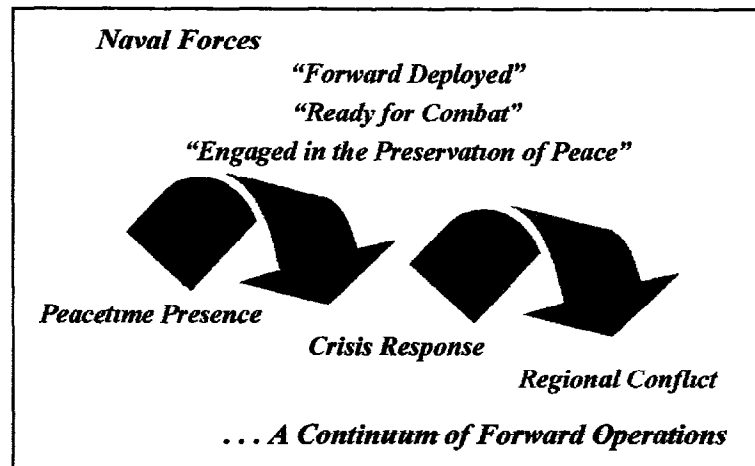
A new paradigm

The resources available at the end of the 19th Century led the United States to acquire a Navy and to find a role for it in a multipolar world. That Navy made significant contributions to the emergence of America as the undisputed leader of the Free World. At the end of the 20th Century, a drastically-changed international environment presents enormous challenges to American power and leadership. Means are no longer expansive, but are still adequate for the task of maintaining America's military preeminence. In 1993, the Department of Defense conducted a Bottom-Up Review (BUR) which recommended smaller force structures for the Service Departments and led to a new *National Security Strategy of Engagement and Enlargement*. Faced with limited means, burgeoning regional commitments, and the results of the BUR, the Navy decided it needed a new blueprint for how naval forces can contribute to joint operations that span the spectrum of conflict.

In 1992, the Navy published a new strategic vision titled *From The Sea*, supplemented by *Forward From The Sea* two years later. These documents envision a shift away from engagements at sea and towards a wide range of operations in the littoral regions. In the post-Cold War era, naval forces will support the *National Security Strategy* by performing five fundamental roles: "projection of power from sea to land, sea control and maritime supremacy, strategic deterrence, strategic sealift, and forward naval presence"¹⁴. Typical missions are categorized under a continuum of forward operations.

¹⁴ Forward From The Sea (Washington, D C: Department of the Navy, 1994),10

Figure 1¹⁵



Naval overseas presence and strategic nuclear deterrence are the principle missions in the peacetime presence category, while crisis response encompasses limited strikes, non-combatant evacuations, and humanitarian relief operations. Typical naval missions in a regional conflict include long-range strikes, forced entries, seizing and defending advanced ports and airfields to enable closure of follow-on air and ground forces, and supporting sustained land combat operations. A closer look at these three categories provides a better indication of the potential strengths and shortfalls of the Navy's new "maritime strategy."

A CLOSER LOOK AT *FORWARD...FROM THE SEA*

Peacetime Presence

According to the Bottom-Up Review, all three Services will continue to provide forces for strategic nuclear deterrence. The BUR recommended a nuclear force structure consisting of 18 Trident submarines, 500 Minuteman III missiles, up to 94 B-52H bombers, and 20 B-2 bombers.¹⁶ A follow-on Nuclear Posture Review (NPR) reaffirmed the continuing value of the triad to deter

¹⁵ Ibid., 3

¹⁶ Les Aspin, Secretary of Defense. Report on the Bottom-Up Review (Washington, D.C.: Department of Defense, October 1993), 26

current and future nuclear threats. The NPR also recommended the Navy reduce its Trident force to 14 boats, each equipped with 24 D-5 sea launched ballistic missiles, while the Air Force will cut its nuclear-capable B-52H force to 66¹⁷. Although they are more expensive to operate than bombers and ICBMs, DoD strongly supported maintaining a two-ocean fleet of SSBNs, since they are the most survivable and flexible leg of the triad. Faced with the uncertain course of democratic reform and still-substantial nuclear arsenals of the states of the former Soviet Union, the force structure recommended by the NPR minimizes risk and meets START II Treaty limitations. If required, the nation could rapidly build on its remaining nuclear forces in response to the reemergence of a more substantial threat.

The *National Security Strategy* states that the nation must “maintain robust overseas presence in several forms, such as permanently stationed forces and pre-positioned equipment, deployments and combined exercises, port calls and other force visits, as well as military-to-military contacts”¹⁸. In an era of overseas base closures, the nation is increasingly dependent on forces that can operate outside the United States on a sustained basis, especially in regions where the U.S. lacks a permanent presence. Naval forces are ideally suited for this task. *Forward From The Sea* indicates Aircraft Carrier Battle Groups (CVBGs) and Amphibious Ready Groups (ARGs) with embarked Marine Expeditionary Units are the basic building blocks for naval overseas presence. These units can rapidly respond to areas of increased tensions to perform a wide range of operations or supplement deployed Air Force and Army units.¹⁹ This follows the logic of the BUR, which established overseas presence as the mission that ultimately sizes the carrier force. The BUR concluded four or five carriers are sufficient for a single major regional conflict (MRC), or a ten

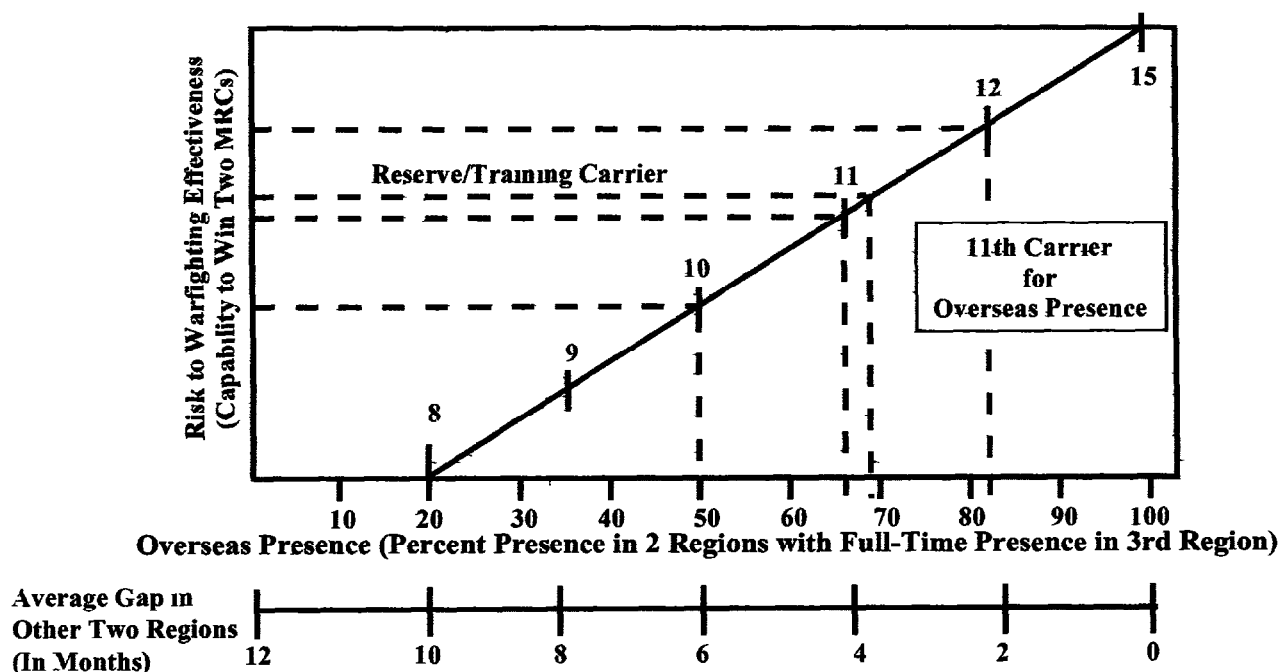
¹⁷ Ibid., 87

¹⁸ *A National Security Strategy of Enlargement and Engagement* (Washington, D.C.: The White House, February 1995), 9.

¹⁹ *Forward From The Sea*, 5

carrier fleet for two-nearly simultaneous MRCs. To maintain the Navy's desired operating tempo, an additional active carrier and a deployable reserve carrier were added for overseas presence

Figure 2: Carrier Force Levels, Warfighting Risk, and Overseas Presence²⁰



As a result of the BUR, the Navy will maintain a twelve-carrier force to provide adequate coverage of the Mediterranean Sea, Western Pacific, and Indian Ocean/Persian Gulf. Additional Army and Air Force units will deploy to the appropriate region when a carrier gap exists. This is a reasonable strategy that seeks to take advantage of the complementary capabilities of air, land and sea forces.

Crisis Response

Crisis response encompasses missions that span the spectrum of operations up to the threshold of war. Naval forces are prepared to provide humanitarian relief, execute non-combatant evacuations with an Amphibious Ready Group, or perform limited strikes like the Tomahawk attack against Iraq by the *Theodore Roosevelt* CVBG in June 1993.²¹ The ability of naval forces to conduct

²⁰ Aspin, 50

²¹ Forward. *From The Sea*, 6

sustained forward operations and avoid political entanglements that may restrict land-based forces significantly increases the options available to a theater commander.

The BUR determined the capabilities required for these lesser contingencies are inherently embedded in a force sized and shaped for two nearly-simultaneous MRCs, with a few exceptions. As real-world taskings grow increasingly frequent, readiness concerns may require another look at this assumption. Deployments extended for operational concerns or back-to-back contingencies can affect morale, reduce training opportunities, and shorten the expected service life of major weapon systems. If this trend continues, crisis response mission requirements may have an increased impact on the size, as well as the shape, of the Navy's force structure.

Regional Conflicts

If the end of the Cold War presented the Navy with a challenge, Desert Storm gave it the opportunity to prove the relevance of naval forces in modern limited conventional conflicts. Fortunately, the forces designed to counter a blue-water Soviet threat were adequate for the challenges of the Red Sea and Persian Gulf littorals, with a few notable exceptions.²² The Navy built on this experience as it formulated its new strategic vision. According to *Forward From The Sea*, naval forces can "serve as the transition force as land-based forces are brought forward into theater" and "contribute to sustained land combat operations."²³ Dominance of the littoral battlespace will allow naval forces to "bring decisive power on and below the sea, on land, and in the air."²⁴

CVBGs and ARGs are again the basic forces for a wide array of missions during regional conflicts. As mentioned earlier, the Bottom-Up Review determined 4-5 carrier air wings were adequate for a typical MRC. However, these results were not based on a rigorous, reproducible

²² For example, the Navy lacked a robust anti-mine capability, experienced delays in receiving the daily Air Tasking Order due to incompatible data transmission equipment, and lacked sufficient quantities of precision munitions.

²³ *Forward From The Sea*, 6-7

²⁴ *From The Sea*, 9

analysis, but were simply “assumed to be about right”²⁵ There are few recent analyses that attempt to determine carrier force requirements for a typical MRC. In 1994, the Air Force conducted a two-MRC campaign analysis that included an evaluation of the relative contribution of carrier airwings for notional conflicts involving Iraq and North Korea. In essence, the study concluded the value of carrier air was greatest in the first days of a conflict, before land-based forces could deploy in substantial quantities. Assuming land-based forces are able to deploy in-theater, the study showed carrier-based aircraft have little relative impact on sustained operations:

Figure 3: Notional Theater Campaign Results²⁶

	With Land-based Air Only 0 CVBGs	With Carrier Air 2 CVBGs	4 CVBGs
Air superiority achieved	12 days	12 days	12 days
50% strategic targets destroyed	30 days	30 days	30 days
50% enemy armor destroyed	9 days	9 days	9 days
Enemy penetration into friendly country	58 km	57 km	57 km
Border reestablished	51 days	50 days	46 days

These results are consistent with an earlier study by the Center for Naval Analyses that concluded:

“The unique contributions of carriers will occur primarily in:

- Peacetime presence and responding to day-to-day crises
- The early days of a fast-breaking regional war”²⁷

²⁵ Conversations with action officers responsible for building BUR force options confirmed the Joint Staff performed little formal analysis of the relative contributions of carrier-based air in a sustained theater campaign

²⁶ General Merrill A. McPeak, Presentation to the Commission on Roles and Missions of the Armed Forces (Washington, D.C.: Headquarters United States Air Force, 14 September 1994), 80

²⁷ David A. Perin, Aircraft Carriers: Why Do We Have Them? How many Do We Need? (Alexandria, VA: Center for Naval Analyses, October 1993)

While the Navy's vision of its role in limited conventional wars has evolved, its concept of how it will provide sustained support for land-based forces remains more or less the same as it was during the Vietnam conflict and Desert Storm. Even its carriers will continue to carry a modified version of the Cold War-era air wing well into the next century. Extreme skeptics may claim the Navy's reliance on offensive carrier operations is simply another manifestation of its traditional fixation on capital ships. The truth is, CVBGs have a critical role to play in major regional conflicts. However, instead of focusing on sustained offensive operations in support of a land campaign, a maritime strategy that emphasizes the unique capabilities of naval forces during the "early days of a fast-breaking war" may be more appropriate for the post-Cold War era.

TOWARDS A MARITIME STRATEGY FOR THE 21st CENTURY

Naval Engagements

What will war in the 21st Century be like? The current *National Military Strategy* indicates the Services must remain prepared to engage in conventional conflicts to defeat a regional aggressor. While the next war will probably not be a repeat of Desert Storm, a conflict in Southwest Asia or along the Pacific Rim is quite possible. Considering the current lack of a credible naval threat, direct operations against an opposing navy will be limited. Russia and the Ukraine field the only navies large enough to pose a challenge, but size is essentially their only threatening characteristic, since their ships are generally poorly manned, equipped, and maintained. More importantly, neither nation seems to have the desire to engage in aggressive actions against their neighbors. Joint force commanders (JFCs) will require naval forces to establish exclusion zones, execute blockades, and ensure sea lanes of communication are kept open, there will be little opportunity for a Mahanian battle. Offensive naval engagements will not be the major factor in determining forces for the Navy of tomorrow. Instead of building a force primarily suited for defeating direct challenges to our

maritime superiority, the Navy should focus on providing forces that can respond to short-notice conflicts rapidly to perform a wide range of critical missions

Key missions and capabilities for future MRCs

The worst-case scenario for an MRC is one where the U.S. must deploy with little or no warning to deter or defeat an aggressor without the benefit of an established in-theater force. What the Navy brings to the fight in the first days of a short-notice conflict is arguably more important than its ability to support joint land-based forces in an extended campaign, assuming land-based forces are able to deploy.²⁸ In addition to establishing maritime superiority and securing ports and airfields for follow-on forces, critical roles for naval forces will likely include theater air and missile defense, striking time-critical targets, suppressing enemy air defenses, and gaming battlespace awareness.

Theater air and missile defense will remain a major concern for theater CINCs, especially in the first days of a crisis. Land-based air defenses require time to deploy their considerable infrastructure, time that an enemy may not grant. The proliferation of weapons of mass destruction increases the need for a comprehensive theater air and missile defense capability early in a conflict.²⁹ Therefore, there will be a great demand for self-deploying air defense forces that can operate relatively free from shore facilities. This is a mission tailor-made for naval forces. The Navy is moving to expand its Aegis-equipped fleet of cruisers and destroyers for air defense operations. Development also continues on an upper-tier system that will help defend friendly forces at sea and ashore. However, these "catcher's mitt" defensive systems may not provide the degree of assurance

²⁸ The notion that the Navy needs an *autonomous* capability to pursue extended operations in an MRC because of the potential inability of land-based forces to deploy in-theater has little credibility. The U.S. has never engaged in a major conflict without access to land bases, nor is it likely to do so in the future. If the U.S. cannot obtain adequate basing rights to deploy a decisive force, chances are it will choose not to commit to the fight to begin with.

²⁹ According to the SECDEF's Annual Report to the President and Congress, "more than 25 countries possess or are developing nuclear, chemical, or biological weapons, and more than 15 nations have ballistic missile delivery systems." William J. Perry, Secretary of Defense, Annual Report to the President and Congress (Washington, D.C.: U.S. Government Printing Office, February, 1995), 182.

a CINC will require before placing land-based forces within range of missiles carrying nuclear, biological, or chemical warheads. The Navy should also consider developing a sea-based capability to destroy theater ballistic missiles before launch and during the ascent phase. This would provide joint forces with a more comprehensive shield from air attacks as well as help deter an enemy from resorting to weapons of mass destruction in the first place.

Sea-based strikes on high-value, time-critical targets in a non-permissive environment will require the use of standoff weapons and stealthy aircraft. The Navy's Tomahawk cruise missiles can be launched from a variety of platforms, including submarines. Other next-generation accurate or precision munitions include the air-delivered Joint Standoff Weapon (JSOW) and Standoff Land Attack Missile-Expanded Response (SLAM-ER). Direct attack munitions include the Joint Direct Attack Munition (JDAM) and the multiple-kill-per-pass, anti-armor Sensor Fused Weapon (SFW). These advanced munitions will help slow an advancing armored force and provide much-needed support for allied forces prior to the arrival of U.S. land-based air and ground units.

While progress continues on a family of advanced munitions, the Navy lacks a stealthy aircraft capable of penetrating undegraded air defenses. This limits its abilities to take the fight to the enemy and strike the most heavily defended targets with precision early in a conflict. The F/A-18E/F, soon to join the Navy's active inventory, has the advantage of additional weapon stations, increased range, and a lower radar cross section. It is *not*, however, a next-generation stealthy aircraft on the order of the Air Force's F-22 or F-117, the latter having proved its value over Baghdad during Desert Storm. A recent theater air campaign analysis determined the stealthy F-22 has the potential to cut friendly aircraft losses by 20%, ground troop casualties by 28%, and armor losses by 20%. In the same scenario, F/A-18E/F losses were almost thirty-five times greater than the

F-22, and air-to-air kills decreased by 18%³⁰ Perhaps the \$86 billion the Navy is spending to acquire 1000 F/A-18E/Fs is a prudent short-term investment, but a sea-based, first-day survivable, stand-alone fighter would expand the options available to a JFC.

Lack of an organic air refueling capability also limits the flexibility and range of carrier-based aircraft Shore-based air refueling aircraft may not be available early in an MRC. Without air refueling, fighter payloads and combat ranges are less than what may be required to attack critical targets deep within an enemy's homeland The Navy's multi-mission S-3 and F/A-18E/F are capable of providing some tactical air refueling, but do not approach the capability of a dedicated sea-based refueling platform

Additional means of delivering munitions directly to shore without the need for an intermediate platform would also increase options available to a JFC early in a crisis Providing an ATACMS-like capability from the sea may also be a more effective means of destroying high-value targets than carrier aircraft.³¹ For example, a partially submersible platform that carries large quantities of standoff cruise missiles or tactical missiles could be used to strike numerous strategic targets rapidly or take down an air defense net allowing attack aircraft to penetrate on follow-up strikes. If such a platform was designed with a relatively low radar cross-section, it might also be able to operate in littoral regions denied to conventional carriers by shore-based threats

In the early days of a conflict, capabilities for the suppression of enemy air defenses (SEAD) will be at a premium. Sea-based F/A-18s can carry the High-Speed Anti-Radiation Missile (HARM) for lethal SEAD With the retirement of the Air Force's EF-111, the Navy's EA-6B will provide

³⁰ The Air Force Studies and Analysis Agency conducted the analysis early in 1995 The scenario was based on a major conflict in Southwest Asia in the year 2010 and used the same force assumptions as the Defense Planning Guidance

³¹ Potentially more cost effective, as well, considering the high cost of operating and defending an aircraft carrier

standoff jamming for joint air forces. Providing these capabilities from the sea early in a conflict will leverage the effectiveness of Air Force bomber strikes originating from the Continental United States as well as non-stealthy fighters deploying in-theater. However, the EA-6B airframe is aging rapidly, and will begin to exit the inventory around 2015.³² A follow-on sea-based SEAD aircraft or electronic countermeasure pods for conventional fighters may be a wise investment for the Navy.

Forces capable of assisting the JFC to gain a better awareness of the joint battlespace will also be in high demand early in a conflict. Sea-based reconnaissance platforms can help determine status of friendly and enemy forces, provide targeting information, and perform bomb damage assessment until land-based forces arrive in theater. Unmanned aerial vehicles (UAVs) are an extremely promising technology. The Navy made limited use of sea-based UAVs during fire support operations in the Gulf War. Future platforms that can penetrate and loiter in the highest threat areas would prove to be an invaluable means of dispelling the fog of war in future conflicts.

CONCLUSION

"Each Service brings something unique to the battlefield; what counts is how you put it all together."

Admiral Jeremy Boorda, 10 April 1995³³

While the Navy of the late 19th Century adopted a Mahanian doctrine on which to build its force structure, the Navy's new strategic vision emphasizes the utility of naval forces for sustained operations at sea, in the littorals, and in support of land-based forces in major regional conflicts. However, it is unlikely that a single Service will provide all forces required for future operations. With few exceptions, decisive warfare will be *joint warfare*.³⁴ Each Service will bring unique and

³² Perry, 208. Thirteen Air Force EC-130 Compass Call aircraft also provide a standoff jamming capability.

³³ From the author's unpublished notes of the Navy/Air Force Staff Talks held at the Naval Academy on 10 April 1995.

³⁴ Even small-scale operations will require some degree of support from other Services. For example, few forces can operate autonomously without the need for communication links and position data provided by Air Force space-based systems.

complementary capabilities to the battle, the key to successful joint warfare will depend on “how you put it all together,” as Admiral Boorda stated. Analyses have shown the unique characteristics of naval forces are most advantageous during the early days of short-notice regional conflicts. In order to better leverage what naval forces bring to the fight, the Navy may want to consider a strategy that emphasizes operations and forces needed in the first critical days of an MRC. For example, Navy theater air and missile defense systems may be the only means a JFC has to defeat enemy air attacks until land-based forces arrive in-theater. A sea-based capability that can destroy enemy missiles before launch and during ascent would provide a more comprehensive defense for friendly forces. In addition, a sea-based, first-day survivable fighter would enhance a JFC’s ability to apply force against an enemy’s command and control nodes, undegraded air defense net, and even the lead elements of his advancing forces. A follow-on sea-based SEAD platform would also improve the ability of joint air forces to penetrate in the early days of an MRC, while a dedicated air refueling aircraft would expand the combat range of sea-based fighters, especially when land-based tankers are in short supply.

Although the Navy is moving away from a Mahanian strategy, it continues to rely on battle groups organized around capital ships as the primary means for naval overseas presence, responding to crises, and prosecuting regional conflicts. The 1993 DoD Bottom-Up Review recommended maintaining a twelve-carrier force for naval overseas presence, while units from the other Services will deploy to meet gaps in coverage in the Mediterranean, Persian Gulf/Indian Ocean, and the Pacific. The BUR also assumed forces for lesser contingencies are inherently imbedded in forces required for two nearly-simultaneous MRCs. Due to the increasing operational tempos resulting from multiple peacetime contingencies, this force-sizing assumption may need to be revisited. Finally, as sea-based technologies continue to mature, the Navy should also investigate the potential for alternative platforms capable of delivering large quantities of munitions ashore without the need

for an intermediate weapons system. This may give a JFC the ability to project lethal force into littoral regions where enemy threats restrict or prohibit carrier operations

By supporting the *National Security Strategy* and meeting the Navy's need for a unifying vision, *Forward From The Sea* fulfills the primary requirements of a maritime strategy. However, past maritime strategies have approached dogma, as the Navy sought to preserve its missions and force structure. To avoid this pitfall, *Forward From The Sea* should be a living document that evolves as naval technologies mature and future threats become more certain. Building a maritime strategy for the 21st Century will require a flexible vision that emphasizes critical missions and capabilities that the Navy can uniquely provide . from the sea